

KMCO LLC EXPLOSION AND FIRE

BACKGROUND:

- KMCO, LLC is a specialty chemical manufacturing and toll processing facility with batch distillation and multiple reaction capabilities and produces over 900 million pounds per year of products.
- Explosion and Fire occurred at approximately 11:00 am. on April 2, 2019.
- Reports indicate the cause was a leak in an isobutylene line that found an ignition source.
- Fire spread to a products/chemical storage warehouse and also impacted tanks containing isobutylene, ethanol, methanol, ethyl acetate, and toluene.
- Shelter-in-Place was issued by City of Crosby in a one-mile radius of the facility.
- EPA team responded and arrived on-site at approximately 12:30 pm.
- EPA ASPECT (Airborne Spectral Photometric Environmental Collection Technology) Aircraft was deployed and began monitoring at 12:55 pm and conducted a final monitoring overflight on April 3, 2019.
- Firefighting activities by local and contract firefighting crews. Fire extinguished at approximately 6:00 pm. PFAS/non-PFAS containing foam was used to extinguish the fire.
- Ground level air monitoring was conducted by Texas Commission on Environmental Quality (TCEQ), Harris County Pollution Control Service (HCPCS), EPA, and specialized contractors for the company (Center for Toxicology and Environmental Health – CTEH).
- Air sampling of the surrounding area was conducted by CTEH for the company.
- EPA ASPECT Aircraft identified the following chemicals: 2-butene, acetone, ammonia, isobutylene and isoprene, all below applicable screening levels.
- EPA Trace Atmospheric Gas Analyzer (TAGA) Bus arrived approximately 1:45 pm and began air sampling activities in an around the facility and surrounding community. No detections at or above the screening levels were identified.
- Handheld monitoring by TCEQ, HCPCS, EPA and CTEH around the facility and community identified only low-level VOC readings near the facility entrance.
- EPA had an on-site presence on the site through April 5, 2019 and has had continued communication with the facility concerning final reporting on the incident.
- TCEQ is providing primary oversight of final cleanup activities – final waste disposal associated with the event is expect on August 9, 2019.

KEY POINTS:

- Explosion and fire believed to have resulted from a leak in an isobutylene line.
- Firefighting and vapor suppression were performed using fire trucks and in-place fire monitors.
- 1 fatality, 2 critical-condition (released), unknown number first-aid/exam

TALKING POINTS:

- All responses start at the local level (Facility, Crosby, Harris County, TCEQ, then EPA)
- EPA conducted oversight and assisted with community air monitoring effort being performed by the facility, Harris County, and TCEQ.
- EPA handheld monitoring identified minimal VOC readings only near the entrance to facility.

Internal/Deliberative

- EPA activated its ASPECT Aircraft to perform aerial monitoring – detections included 2-butene, acetone, ammonia, isobutylene and isoprene, all below applicable screening levels.
- EPA activated its TAGA Bus to perform air sampling – no detections at or above the screening levels were identified.